BRUHAT BENGALURU MAHANAGARA PALIKE

Name of work : Improvements to Roads and Drains at Kogilu Layout at Ward No.05

							Estimate		6000000
Sl No	Description of work	No	Dimensions			Quantity	Rate	Unit	Amount
			L	B	D				
1	2	3	4	5	6	7	8	9	10
1	KSRRB 300-1. Earthwork excavation by manual means in ordinary soil involving an average horizontal throw upto 2 meters and an average lift upto 0.5 m, excavated surface leveled and sides neatly dressed, the disposed earth to be leveled neatly after breaking of clods complete as per specifications complete as per specificatioMORTH Chapte(**P-142, It,-19.2)**								
	Basic Rate	113.00							
	Area Weightage 6%	6.78							
	Total	**119.78**							
	DRAIN	2	690.00	0.65	0.20	179.40			
	ASP ROAD	1	690.00	6.00	0.20	828.00			
					Total	**1007.40**	**119.78**	**Cum**	**120666**
2	KSRRB M100-1 Loading and unloading of stone boulder/stone aggregates/sand/.kanker/moorum. KSRRB M100-1:Placing tipper at loading point, loading with front end loader, dumping, turning for return trip, excluding time for haulage and return trip complete as per specification MORTH Chapter 1 **(P-130, It.No. 17.1)**								
	Basic Rate Conveying for 10 km	88.60							
	Area Weightage 6%	5.32							
	Total	**93.92**							
						1007.40			
					Total	**1007.40**	**93.92**	**Cum**	**94611**
	KSRRB M300-55. Construction of sub-grade and earthen shoulders with approved material Gravel/Murrum with all lifts & leads, transporting to site, spreading, grading to required slope and compacted to meet requirement of Table No. 300-2 complete as per specifications (including cost of earth, watering charges & compaction by vibratory roller) MORTH Specification No. 305 **(P-148, It.-19.62)**								
	Basic Rate:	302.00							
	Area Weightage 6%	18.12							
	Total	**320.12**							
		1	690.00	6.00	0.15	621.00			
					Total	**621.00**	**320.12**	**Cum**	**198795**
3	KSRRB M400- Wet Mix Macadam KSRRB M400-17. Providing, laying, spreading and compacting crushed stone aggregates of granite / trap / basalt to wet mix macadam specifications including pre mixing the material with water at OMC in mechanical mix plant carriage of mixed method of tipper to site, laying in uniform layers with paver in sub-base/base course on well prepared surface and compacting with vibratory roller to achieve the desired density complete as per specifications. MORTH Specification No. 406 **(P-158, It.No. 20.18)**								
	Basic Rate:	1668.00							
	Area Weightage 6%	100.08							
	Total	**1768.08**							
		1	690.00	6.00	0.20	828.00			
					Total	**828.00**	**1768.08**	**Cum**	**1463970**

	KSR[illegible] 500-1. Cleaning the existing WBM road surface including removing of binding materials and other foreign matter with wire brushes and small picks, sweeping with brooms or soft brushes and finally dusting with old gunny bags and / or compressed air, to receive bituminous treatment including cost of all materials, labour, HOM of machineries complete as per specifications.MORTH Chapter 5 (**P-161 IT NO 21.1)**								
	Basic Rate	13.00							
	Area Weightage 6%	0.78							
	Total	**13.78**							
		1	690.00	6.00		4140			
					Total	**4140.00**	**13.78**	**SQM**	**57049**
5	KSRRB M500-6. Providing and applying primer coat with bitumen emulsion on prepared surface of granular base including clearing of road surface and spraying primer at the rate of 0.60 kg / sqm using mechanical means complete as per specifications. MORTH Specification No. 502 **PAGE161 IT NO 21.6**								
	Basic Rate	26.00							
	Area Weightage 6%	1.56							
	Total	**27.56**							
		2	690.00	6.00		8280.00			
					Total	**8280.00**	**27.56**	**Sqm**	**228197**
6	KSRRB 500-11. Providing and laying bituminous macadam on prepared surface with crushed coarse aggregates as per design mix formula for base / binding course including loading of aggregates with F.E. loader, hot mixing of stone aggregates and bitumen in hot mix plant 40 tonne capacity, transporting the mixed material in tipper to paver and laying mixed materials with paver finisher to the required level and grade, rolling by power roller to achieve the desired density, 50 /75mm compacted thickness with 3.3% bitumen but excluding cost of primer / tack coat with lead upto 1km including cost of all materials, labour, HOM of machineries complete as per specifications.MORTH Chapter 5 **PAGE162 IT NO 21.11.2**									
	Basic Rate	5306.00							
	Area Weightage 6%	318.36							
	Total	5624.36							
		1	690.00	6.00	0.05	207.00			
						207.00	**5624.36**	**Cum**	**1164243**
7	KSRRB M500-19. Providing and laying bituminous concrete 40 mm thick with 100-120 TPH batch type hot mix plant producing an average output of 75 tonnes per hour using crushed aggregates of specified grading, premixed with bituminous binder at 5.4 to 5.6% of mix and filler, transporting the hot mix to work site, laying with a hydrostatic paver finisher with sensor control to the required grade, level and alignment, rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired compaction as per MORTH specification clause No. 500.9 complete in all respects complete as per specifications **PAGE165IT NO 21.23.2**									
	Basic Rate	8151.00							
	Area Weightage 6%	489.06							
	Total	**8640.06**							
		1	690.00	6.00	0.030	124.20			
						124.20	**8640.06**	**Cum**	**1073095**

	SRB M800-13.Road Marking with Hot Applied Thermoplastic Compound with Reflectrising Glass Beads on Bituminous Surface:- Providing and laying of hot applied thermoplastic compound 2.5 mm thick including reflectorising glass beads at 250 gms per sqm area, thickness of 2.5 mm is exclusive of surface applied glass beads as per IRC:35. The finished surface to be level, uniform and free from streaks and holes complete as per specifications. MORTH Specification No. 803 **PAGE185IT NO 24.15**								
	Basic Rate	512.00							
	Area Weightage 6%	30.72							
	Total	**542.72**							
		2.5	690.00	0.15		258.75			
						258.75	**542.72**	**SQM**	**140429**
9	Removing B.S.Slab of drain & stacking as per specification **(P-25 It.5.32)**								
	Basic Rate	62.00							
	Area Weightage 6%	3.72							
	Total	**65.72**							
		1	690.00		1.35	931.50			
					Total	**931.50**			
	Deduct 15% missing slab				**(-)**	**139.73**			
					Net qty	**791.78**	**65.72**	**Sqm**	**52035**
10	Refixing stone slabs of drains and pointing in C.M (1:3) as per specifications. **(P-25, It. 5.33)**								
	Basic Rate	76.00							
	Area Weightage 6%	4.56							
	Total	**80.56**							
		Qty same as item No.2				791.78			
					Total	**791.78**	**80.56**	**Sqm**	**63785**
11	Providing 7.5cm thick granite slabs of selected quality roughly dressed and fixed in cement mortar (1:6) including fixing curing etc., complete. **(P-25, It. 5.31.1)**								
	Basic Rate:	628.00							
	Area Weightage 6%	37.68							
	Total	**665.68**							
		Qty same as missing				139.73			
					Total	**139.73**	**665.68**	**Sqm**	**93012**
12	Providing and fixing 10 cm thick pre cast RCC covering slab using reinforced cement concrete M 20 mix with stone aggregate 20 mm and down size including centring shuttering reinforcement and bar bending machine mixed concrete laid in layers not exceeding 15 cm thick wellcopacted cost of all materials labour curing complete as per specification **(Data Rate Approved)**								
	Basic Rate:	2100.00							
		1	30.00	0.90		27.00			
	MISSING Slab	1	40.00	0.90		36.00			
					Total	**63.00**	**2100.00**	**Sqm**	**132300**
13	KSRB 5.2-3:Providing and constructing granite / trap / basalt size stone masonry in foundation cement mortar 1:6 stone hammered dressed in courses not less than 20 cms high, bond stones at two m, apart in each course including cost of materials, labour, curing complete as per specifications. **(P-25, It5.6)**								
	Basic Rate:	4187.00							
	Area Weightage 6%	251.22							

		4438.22							
		2	690.00	0.20	0.20	55.20			
					Total	**55.20**	**4438.22**	**Cum**	**244990**
	KSRB 4-1.6:Providing and laying in position plain cement concrete of mix M15 with cement @240kgs with 20mm and down size graded granite metal, coarse aggregate @0.878cum and fine aggregate @0..459 cummachine mixed, concrete laid in layers not exceeding 15 cms, thick well compacted, in foundation, plinth and cills, including cost of all materials, labour, HOM of machinery, curing complete as per specifications. **(P-12, It.4.6)**								
	Basic Rate:	5441.00							
	Area Weightage 6%	326.46							
	Total	**5767.46**							
	coping	2	690.00	0.20	0.100	27.60			
		4	690.00	0.10	0.100	27.60			
					Total	**55.20**	**5767.46**	**Cum**	**318364**
15	9% of KRIDL charges								**5445541**
16	1%PMC								**490099**
17	Miscellaneous & Rounding off								**56000**
	Total Rs:							**L/S**	**8360**
									6000000

CERTIFICATE

1. The work spot has been inspected and found to be necessary
2. The provisions made in the estimate are necessary and minimum
3. The estimate is based on CSR of 2016-2017

Puja Parshi
Assistant Engineer
Project Division

Assistant Executive Engineer
Project Division

Executive Engineer
Project Division, 9/x/17

Administrative Approval
Accorded For Rs. 60.00 Lakhs
Head of A/C P-3112
CER NO 48/17-18 **Dt:** 9/10/17

E.E. (Project) 9/x

Technical Sanction
Accorded For Rs. 60.00 Lakhs
Head of A/C P-3112
CER NO 136/17-18 **Dt:** 10/10/17

CE (YNK)